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| **Computing Policy** |
| Date: | March 2022 | Review Date: | February 2023 |

**Introduction** 

At St. Dominic’s Primary School, we understand that ICT has evolved to become a part of everyday life and therefore we have a duty to provide a high-quality computing curriculum. The new National Curriculum has been developed to ensure children are taught the computational skills and digital literacy essential to their future both socially and economically. It is our aim to impart this knowledge so that they become competent, responsible, and creative participants in the technology-rich world in which we live.

This policy will detail how we as a school will deliver the new computing curriculum requirements for KS1 and KS2. We aim to inspire our pupils with an array of technologies and a multifaceted skill set that they can apply at secondary school and beyond.

The national curriculum for computing aims to ensure that all pupils:



**Contents**

1. Aims
2. Rationale
3. Legislations and Guidance
4. Roles and Responsibilities
5. Intent
6. Implementation
7. Inclusion
8. Assessment
9. Monitoring
10. Impact
11. Policies

2**. Aims**

The school’s aims are to:

• Provide a broad, balanced, challenging, and enjoyable curriculum for all pupils.

• Develop pupil’s computational thinking skills that will benefit them throughout their lives. • Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2

• To respond to new developments in technology

• To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.

• To enhance and enrich learning in other areas of the curriculum using IT and computing.

• To develop the understanding of how to use computers and digital tools safely and responsibly

3**. Rationale**

The school believes that IT, computer science and digital literacy:

• are essential life skills necessary to fully participate in the modern digital world.

• allows children to become creators of digital content rather than simply consumers of it. • provides access to a rich and varied source of information and content.

• communicates and presents information in new ways, which helps pupils understand, access, and use it more readily.

• can motivate and enthuse pupils.

• offers opportunities for communication and collaboration through group working

• has the flexibility to meet the individual needs and abilities of each pupil.

4. **Legislation and Guidance**

This policy reflects the requirements of the [National Curriculum programmes](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/425601/PRIMARY_national_curriculum.pdf) of study, which all maintained schools in England must teach. It also reflects requirements for inclusion and equality as set out in the [Special Educational Needs and Disability Code of Practice 2014](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/398815/SEND_Code_of_Practice_January_2015.pdf) and [Equality Act 2010](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/315587/Equality_Act_Advice_Final.pdf), and refers to curriculum-related expectations of governing boards set out in the Department for Education’s [Governance Handbook](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/925104/Governance_Handbook_FINAL.pdf). In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the [Early Years Foundation Stage (EYFS)](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/974907/EYFS_framework_-_March_2021.pdf) statutory framework.

5. **Roles and Responsibilities**

**The Governing Board**

The governing board will monitor the effectiveness of this policy and hold the headteacher to account for its implementation and will also ensure that:

• A robust framework is in place for setting curriculum priorities and aspirational targets.

• Enough teaching time is provided for pupils to cover the National Curriculum and other statutory requirements.

• Proper provision is made for pupils with different abilities and needs, including children with Special Educational Needs and Disabilities (SEND).

• The school implements the relevant statutory assessment arrangements.

• It participates actively in decision-making about the breadth and balance of the curriculum.

• It fulfils its role in processes to disapply pupils from all or part of the National Curriculum, where appropriate, and in any subsequent appeals.

**Headteacher**

The headteacher is responsible for ensuring that this policy is adhered to, and that:

• All required elements of the Computing Curriculum, and additional provision which the school chooses to offer, have aims and objectives which reflect the aims of the school and indicate how the needs of individual pupils will be met.

• The amount of time provided for teaching the required elements of the curriculum is adequate and is reviewed by the governing board.

• Where appropriate, the individual needs of some pupils are met by permanent or temporary disapplication from all or part of the National Curriculum.

• The school’s procedures for assessment meet all Curriculum requirements.

• The governing board is fully involved in decision-making processes that relate to the breadth and balance of the curriculum.

• The governing board is advised on whole-school targets within the School Improvement Plan (SDP) in order to make informed decisions.

• Proper provision is in place for pupils with different abilities and needs including International New Arrivals (INA) and children with Special Educational Needs and Disabilities (SEND).

**Leaders of Learning**

Leaders of Learning in close liaison with the Senior Leadership Team (SLT) will ensure that the school curriculum is implemented in accordance with this policy by:

• Monitoring in line with the school’s Monitoring and Assessment Timetable.

• Attending and disseminating relevant continuing professional development (CPD) courses.

• Devising and implementing a subject specific action plan in line with the school’s SIP.

• Sharing effective practice.

• Supporting staff, including Early Career Teachers (ECTs) and Recently Qualified Teachers (RCTs).

• Suggest hoe the budget is spent based on Curriculum developments.

**Teachers**

• Plan Cross-Curricular lessons with the help of the Computing Lead.

• Equip children with the knowledge and skills within the Computing Curriculum to build confidence and creativity.

• Develop and help children to understand how to use the internet and computing technologies safely and responsibly.

• Meet individual needs and provide for a range of abilities including SEND and EAL.

Intent, Implementation and Impact

6. **Intent**

St. Dominic’s Catholic Primary School’s Computing Curriculum is broad and ambitious, and designed to give all our pupils, particularly those that are disadvantaged and pupils with SEND, the knowledge and cultural capital they need to succeed in life.

**Early Years** (see also Early Year’s Policy)

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities such as ‘programming’ each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys. Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly beneficial for children who have English as an additional language.

By the end of **key stage 1** pupils are taught to:

• understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions

• write and test simple programs

• use logical reasoning to predict the behaviour of simple programs

• organise, store, manipulate and retrieve data in a range of digital formats

• Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of **key stage 2** pupils are taught to:

• design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

• use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs

• use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs

• understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration

• describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely

• Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

7**. Implementation**

St. Dominic’s RC Primary School’s Computing Curriculum is designed in a way that allows pupils to transfer key knowledge to long-term memory; it is sequenced so that new knowledge and skills build on what has been taught before and towards defined end points. Our key principles of implementation include:

• Teachers have expert knowledge of the subjects they teach with the help of our provider Kapow

• Teachers present key concepts clearly and invite appropriate discussions

• Teachers check pupils’ understanding effectively, identifying and correcting misunderstandings

• Teachers ensure that pupils embed key concepts in their long-term memory and apply them fluently

• Teachers enable pupils to transfer key knowledge to long-term memory, sequence the learning and ensure that it is building towards the defined end points

• Teachers use assessment to check pupils’ understanding

• Teachers use assessment to help pupils embed and use knowledge fluently, develop their understanding, and not simply memorise disconnected facts.

• Teachers are aware that all these provisions are in place on our Kapow dashboard and documents on the main server.

These core principles are cornerstones of the school’s continuing success:

PLANNING

Lessons are planned using the National Curriculum and school’s Computing Skills Progression objectives. Lesson plans for main sections of the curriculum (e.g. coding) are also available for teachers to use and adapt as necessary for their class. A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T children, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities, teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in accordance with the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure that appropriate provisions and/or interventions are put in place.

DIFFERENTIATION

Teachers consciously and strategically plan the teaching and activities across the ability range whilst consistently monitoring progress. Intervention at the point of learning ensures the pupils are learning more precisely and are continually motivated and make more progress.

SPEAKING AND LISTENING

Teachers and teaching assistants are consciously and strategically emphasising speaking and listening through generating new vocabulary, explicit feedback, modelling, para-phrasing, encouraging extended responses, partner working and active listening. As a result, pupils rapidly become more articulate and confident in speaking, expanding their vocabulary and become more socially responsive.

HIGHER LEVEL/TECHNICAL VOCABULARY

Teachers and teaching assistants deliberately use higher level and technical vocabulary to ensure pupils understand the concepts involved. As a result, students are more able to understand the curriculum content, extend their vocabulary and are more articulate in discussion.

PROBLEM SOLVING

Teachers and Teaching Assistants deliberately and consistently frame activities within a problem-solving context, including challenging all pupils with greater depth opportunities, the acquisition of learning skills; such as enquiry, reasoning, resilience, resourcefulness and collaboration. As a result, pupils become more inquisitive and persistent, whilst understanding more and learning from both success and failure.

QUESTIONING

Teachers and Teaching Assistants carefully and responsibly utilise a range of questioning techniques and tactics e.g. wait time, are deliberately democratic, provide positive and concrete feedback, require more explanation, put the onus on students individually and collectively.

MARKING AND FEEDBACK

Teachers regularly assess progress through observations and evidence. Key objectives to be assessed are taken from the National Curriculum to assess computing each term. The school uses the Kapow statements as a guide when assessing pupils. Each pupil’s attainment is then recorded on the School Computing Progress sheet every half term. Assessing computing is an integral part of teaching & learning and key to good practice. Assessment should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of computing concepts. As assessment is part of the learning process, it is essential that pupils are closely involved. Assessment can be broken down into;

• Formative assessments are carried out during and following short, focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.

• Summative assessment should review pupils' ability and provide a best fit ‘level’. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the term. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded, or not achieved the learning objectives. We assess the children’s work in computing by making informal judgments as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgment of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit. The children’s work is saved on Seesaw or stored in the class files. Other work may be printed and filed within the subject from which the task was set.

LITERACY AND MATHS

Literacy and Maths are used to promote deeper subject specific learning and allow pupils greater application of skills especially in terms of problem solving.

EARLY YEARS FOUNDATION STAGE

All areas of learning and development are important and inter-connected. All 7 areas are particularly crucial for igniting children’s curiosity and for building their capacity to learn, form relationships and thrive.

We deliver learning for all of the areas through purposeful play and learning experiences, with a balance of adult-led and child-initiated activities. At St Dominic’s School, we recognise that children learn and develop in different ways and at different rates. We value all areas of learning and development equally and understand that they are interconnected and ensure:

CREATIVITY AND CRITICAL THINKING

Children should be given opportunity to be creative through all areas of Computing. At St Dominic’s, we can support children’s thinking and help them to make connections by showing genuine interest, offering encouragement, clarifying ideas and asking open questions. Children can access resources freely and are allowed to move them around the classroom to extend their learning.

• Focus on getting the basic skills right early, with high emphasis placed on communication, early number, phonics, vocabulary skills, Personal, Social and Emotional Development (PSED).

• Focus on ensuring pupils are well rounded, thoughtful and able to work in a variety of group and individual situations with thoughtfulness and resilience.

• Focus on building happy, confident learners.

8. **INCLUSION**

Teachers set high expectations for all pupils. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils

- Pupils with low prior attainment

- Pupils from disadvantaged backgrounds

- Pupils with SEN

- Pupils with English as an additional language (EAL).

Teachers will plan lessons so that pupils with Special Education Needs and Disabilities (SEND) can study every National Curriculum subject, wherever possible, and ensure that there are no barriers to every pupil achieving. Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects.

9. **MONITORING ARRANGEMENTS**

Governors monitor coverage of National Curriculum subjects and compliance with other statutory requirements through:

• The Board of Governors Teaching and Learning Committee is responsible for monitoring the way the school curriculum is implemented – agenda led and monitored to address each subject area including Computing.

• The head teacher is responsible for the day-to-day organisation of the Computing curriculum.

• Leaders of Learning monitor the way that their subject is taught throughout the school through:

- Lesson Observations;

- Learning Walks;

- Pupil Voice;

- Analysis of data;

- Planning Scrutinies;

- Work Scrutinies.

Leaders of Learning report back to SLT on standards and monitoring activities.

10**. IMPACT OF THE SCHOOL’S CURRICULUM**

The school implements a broad balanced and enriched Computing curriculum as a result:

* Pupils develop as critical thinkers and are able to understand how to make informed and appropriate digital choices in the future.
* Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
* Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
* Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
* Show a clear progression of technical skills across all areas of the national curriculum - computer science, information technology and digital literacy.
* Be able to use technology both individually and as part of a collaborative team.
* Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner.
* Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.
* Meet the end of Key Stage expectations outlined in the National curriculum for Computing.
* Precision in planning, we know that the Computing curriculum is covered in the required depth exemplified within the statutory and non-statutory guidance of the national curriculum.
* Learning begins from three years old. Pupils have access to a range of resources.
* Development of the whole child and gaining a sense of awe and wonder, pupils are happy, engaged learners eager to share their learning with adults, family and class peers.
* The computing curriculum being fully inclusive for all, pupils have time and opportunities to work alongside their class peers who may have learning and physical needs, this creates a strong sense of care and inclusivity.
* Lessons are planned around pupil’s interests and questions; pupils are actively engaged in their own learning and eager to investigate beyond the classroom.

11. Links With Other Policies

* Online Safety Policy
* Cyberbullying Policy
* Safeguarding Policy
* Accessibility Policy
* SEND and Inclusion Policy
* Teaching and Learning Policy
* Early Years Foundation Stage Policy

Signature of Chair of Governing Body

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Signature of Head Teacher

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Review Date

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